**Queensland Health** 

### Data linkage initiatives under development to support Public Health Intelligence in Queensland

#### Information for Action

Prof Ross Andrews

Executive Director Public Health Intelligence (PHI) Branch QPHaSS

21 November 2024



# World-leading approach to protect babies from RSV

Australian mums and their newborn babies will have free access to the best and most comprehensive protection in the world against respiratory syncytial virus (RSV) ahead of Winter in 2025.

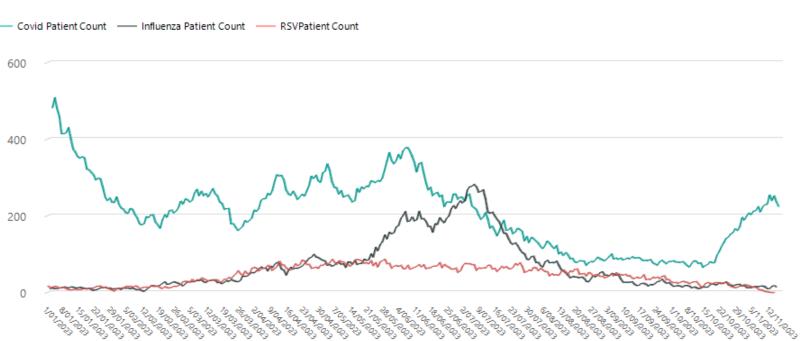
World-leading approach to protect babies from RSV | Health Portfolio Ministers | Australian Government Department of Health and Aged Care

The Government is investing \$174.5 million to provide pregnant women with free access to the maternal respiratory syncytial virus (RSV) vaccine, Abrysvo, under the National Immunisation Program (NIP).

To ensure that every single Australian baby is protected, the Australian Government has worked with all States and Territories to <mark>support national access to the monoclonal antibody,</mark> Beyfortus, which provides direct protection to newborns and young children. The Commonwealth has brought together a national working group to support this work.



Total Trend



ARI bed occupancy rapid risk assessment executed at 15nov2023 6:30:10 AM



COVID Flu

RSV First Nations ARI

Number of persons hospitalised with COVID-19, Influenza or RSV in Queensland since 1 January 2024



Acute respiratory infection surveillance reporting | Queensland Health



2024

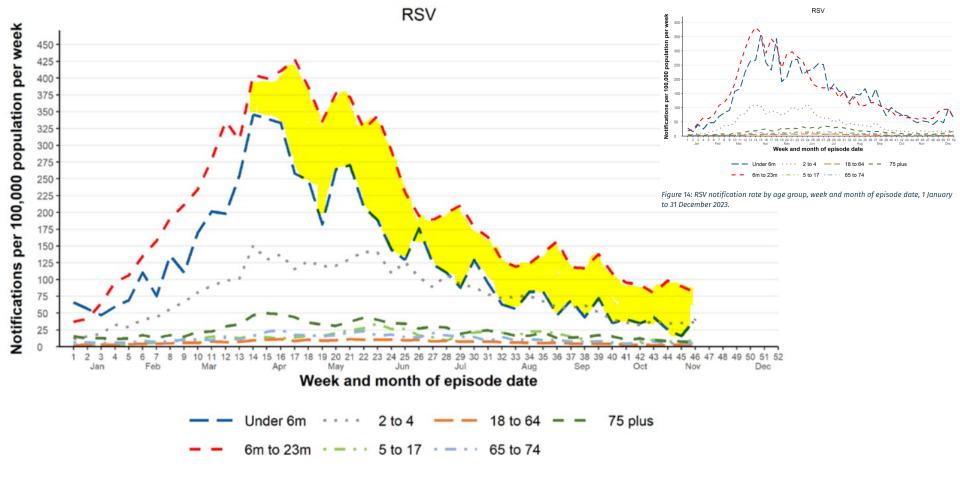
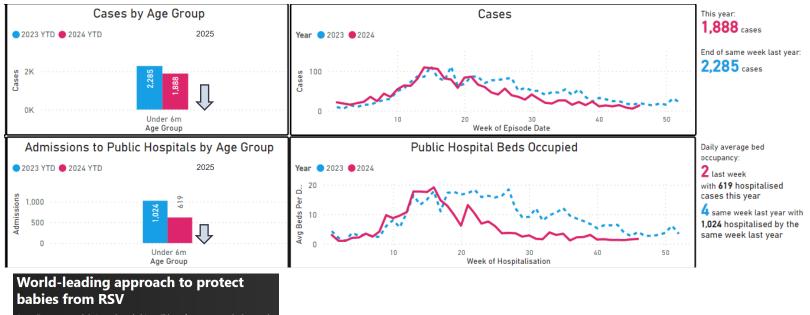


Figure 14: RSV notification rate by age group, week and month of episode date, 1 January to 17 November 2024.

Queensland Acute Respiratory Infection Surveillance Report - 1 January - 17 November 2024 (health.gld.gov.au)

Queensland Government	ARI Executive Summary - RSV				Public Health Intelligence (PHI) Branch Queensland Public Health & Scientific Services (OPHaSS)
Disease	First Nations	Age Group	Gender	Vaccine Brand	Hospital and Health Service
RSV 🗸	All 🗸	Under 6m 🗸 🗸	All 🗸	All 🗸	All 🗸



Australian mums and their newborn babies will have free access to the best and most comprehensive protection in the world against respiratory syncytial virus (RSV) ahead of Winter in 2025.

Public Health Intelligence Branch - PHI Data Analytics Team

Report Version 1.0

UI Tips (Hover)

18/11/2024 Refresh Date 1:30:55 PM Refresh Time

#### Targets by March 2025

work packages with Clinical Business Intelligence (CBI)





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### Thank You

**Prof Ross Andrews** 

Executive Director Public Health Intelligence (PHI) Branch QPHaSS

21 November 2024



#### ARTICLE | OCTOBER 09 2023

## Maternal Pertussis Vaccination, Infant Immunization, and Risk of Pertussis 👌

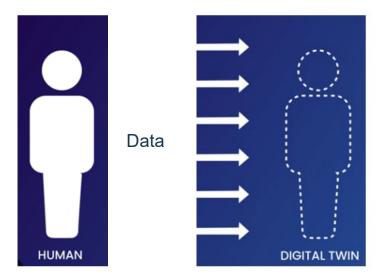
Annette K. Regan, PhD S; Hannah C. Moore, PhD; Michael J. Binks, PhD; Lisa McHugh, PhD; Christopher C. Blyth, PhD; Gavin Pereira, PhD; Karin Lust, MBBS; Mohinder Sarna, PhD; Ross Andrews, PhD; Damien Foo, PhD; Paul V. Effler, MD; Stephen Lambert, MBBS; Paul Van Buynder, MBBS

#### vaccination in pregnancy prevents pertussis in early infancy

- VE 76% (64%,84%) against pertussis in first 6 months of life in Queensland
  - $\circ$  297K births: most (194K) were in Qld from aug2014 end 2017; 75K births in WA; 10K in NT
  - $\circ$  124 infants had pertussis in the first 6 months of life



#### Public Health Digital Twin of QLD Population





Geospatial modelling



- Data collection
- Integration and analysis
- Simulation/prediction
- Targeted intervention/prescriptive analytics